## Climate Change and Human Health Literature Portal



# dbPSHP: A database of recent positive selection across human populations

Author(s): Li MJ, Wang LY, Xia Z, Wong MP, Sham PC, Wang J

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#### Abstract:

The dbPSHP database (http://jjwanglab.org/dbpshp) aims to help researchers to efficiently identify, validate and visualize putative positively selected loci in human evolution and further discover the mechanism governing these natural selections. Recent evolution of human populations at the genomic level reflects the adaptations to the living environments, including climate change and availability and stability of nutrients. Many genetic regions under positive selection have been identified, which assist us to understand how natural selection has shaped population differences. Here, we manually collect recent positive selections in different human populations, consisting of 15,472 loci from 132 publications. We further compiled a database that used 15 statistical terms of different evolutionary attributes for single nucleotide variant sites from the HapMap 3 and 1000 Genomes Project to identify putative regions under positive selection. These attributes include variant allele/genotype properties, variant heterozygosity, within population diversity, long-range haplotypes, pairwise population differentiation and evolutionary conservation. We also provide interactive pages for visualization and annotation of different selective signals. The database is freely available to the public and will be frequently updated.

Source: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3965004

## Resource Description

## Exposure: M

weather or climate related pathway by which climate change affects health

**Unspecified Exposure** 

#### Geographic Feature: M

resource focuses on specific type of geography

None or Unspecified

### Geographic Location: M

resource focuses on specific location

Global or Unspecified

### Health Impact: M

specification of health effect or disease related to climate change exposure

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Health Outcome Unspecified

Mitigation/Adaptation: ™

mitigation or adaptation strategy is a focus of resource

Adaptation

Resource Type: **☑** 

format or standard characteristic of resource

Research Article

Timescale: **☑** 

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment: ™

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content